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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,175	06/20/2001	David M. Teter	SD6785/S96438	5991
7590	03/30/2004		EXAMINER	
Timothy D. Stanley Sandia National Laboratories P.O. Box 5800 - MS-0161 Albuquerque, NM 87185-0161			CINTINS, IVARS C	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

15

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/886,175	TETER ET AL.
Examiner	Art Unit	
Ivars C. Cintins	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 19 December 2003.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 5-8 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

Art Unit: 1724

Initially, it is noted that claims 5-8 have been identified as "Original" in the listing of claims contained in the response filed December 19, 2003; when, in fact, these claims have been withdrawn from further consideration as being directed to a non-elected invention. Applicant is advised that any future listing of claims must include the identifier "withdrawn" for these claims, in accordance with revised 37 CFR 1.121.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are again rejected under 35 U.S.C. 102(a) as being anticipated by Sivavec (U.S. Patent No. 6,238,570). As pointed out in the previous Office action, the reference discloses contacting water containing chromate (see col. 5, line 65) with a treating agent comprising magnetite (see col. 5, line 9), and this is all that is required by claims 1-4.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson et al. (U.S. Patent No. 4,134,831). As pointed out in the previous Office action, the reference discloses contacting water containing arsenate (see Table I in col. 4) with a treating agent comprising magnetite (see col. 5, line 67 through col. 6, line 5), and this is all that is required by claims 1-4.

Applicant's arguments filed December 19, 2003 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that neither Sivavec nor Dawson et al. teaches a "... sorbent material that binds anionic species

predominantly through the formation of surface complexes ..." as required by lines 3-4 of claim 1. It is pointed out, however, that since both of these references disclose contacting an aqueous stream containing the recited anionic contaminants (i.e. anionic chromium in Sivavec, and anionic arsenic in Dawson et al.) with a composition containing the recited "sorbent" material (i.e. magnetite ( $Fe_3O_4$ ); see claim 3, line 3), the results obtained in each of these two reference processes must inherently be the same as those obtained by Applicant. The fact that neither of these reference disclosures the formation of surface complexes between the contaminant and the magnetite is not deemed to be significant since it is axiomatic that one who performs the steps of a process must, in so doing, necessarily produce all of its functions, for these functions naturally flow from it, and are an inseparable part of it. Mere recitation of a newly discovered function or property that is inherently possessed by things in the prior art does not cause a claim drawn to those things to distinguish over the prior art. *General Electric. Co. v Jewel Incandescent Lamp Co.*, 67 USPQ 155 (1945); *In re Oelrich*, 212 USPQ 323 (C.C.P.A. 1981); *In re Best*, 195 USPQ 430 (C.C.P.A. 1977); *In re Swinehart*, 169 USPQ 226 (C.C.P.A. 1971).

Sugano et al. (U.S. Patent No. 3,931,007) discloses that when chromium (see col. 1, line 13; col. 2, line 29; and col. 5, lines 13 and 45) is contacted with magnetite in an aqueous solution (col. 1, line 8; col. 2, line 26; and col. 5, lines 24 and 43), this chromium will be adsorbed by the magnetite (col. 1, lines 57-58; and col. 5, lines 20-21).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (571) 272-1156.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ivars Cintins*  
Ivars C. Cintins  
Primary Examiner  
Art Unit 1724

I. Cintins  
March 22, 2004